Abstract of the Disclosure

5

10

15

To provide a lamp seal that avoids cracking of the functionally gradient material in the manufacturing process, that assures adequate mechanical strength of the finished product, and that has improved productivity because of the ease of welding when the light-emitting tube of the lamp is sealed, the lamp seal (20) comprising a functionally gradient material (21) and a lead bar (11), in which the functionally gradient material (21) has layers of mixtures of electrically non-conductive material and conductive material such that one end is non-conductive and the other end is conductive, with layers such that the proportion of conductive material increases in stages or continually moving from one end to the other, in which the lead bar (11) passes through a hole formed in the direction of layering of the functionally gradient material and is attached in the conductive region of the functionally gradient material (21), has the proportion of conductive material at the point of attachment (26) of the lead bar (11) to the functionally gradient material set at no less than 0.6 Vol% and no more than 39 Vol%. Furthermore, a gap(24) is created between the lead bar (11) and the functionally gradient material (21) in the region from the point of attachment (26) to the non-conductive end of the functionally gradient material (21).